Electronic Transactions - An Introduction to EDI in the Retail Industry

Put simply, one of the major global business activities consists in the production of goods and their distribution to end-users via wholesalers and retailers. This flow of goods is accompanied by a wealth of necessary documentation (orders, order acknowledgements, amendments, invoices, product catalogues, pricelists etc.), which have to be exchanged between the parties involved in order to ensure the correct flow of merchandise. The article gives a brief introduction to EDI and describes how the retail industry currently is introducing an electronic trading system in Europe.

One criterion in trade is the rapid supply of customers and the ability to react swiftly to changes in market demand. Let us take a closer look at this process:

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The retailer places his order with the supplier as the result of customer demand and his own lack of the appropriate goods in stock; the order is based on the supplier's current product catalogue and current pricelist. If the order is not for an off-the-shelf product package, but has to be made up from various items in the product catalogue, the chances of an incorrect order are considerable. The supplier discovers such discrepancies when he checks incoming orders and makes the necessary corrections after consultation with the retailer. All the necessary documentation is exchanged between retailer and supplier on paper. In order to keep administrative work to a minimum, the retailer does not bother to rectify his order in his PC application; this leads to him losing the opportunity of obtaining an informative evaluation and statistics concerning his business with the supplier; the supplier, on his part, is compelled to perform a labour-intensive examination of incoming orders and record these in his own computer system. Thus the processing of paper-based business transactions invariably leads to administrative work and delays in execution of the order as a result.

Electronic Trading Project in the European Retail Industry

Companies active in industry and commerce have recognized these facts and are currently introducing an electronic trading system throughout Europe whose primary function is to regulate the flow of goods between distribution centres and sales outlets (retailers).

This comprehensive solution is based on a data converter and communications system operating under UNIX in the distribution centres and under DOS/Windows in the sales outlets; a comprehensive integrated package (EDI*WIN/Order) is used in the sales outlets which contains not only the data converter and data communications module but also an application for the execution of the business transactions of ordering, order acknowledgement and order amendment. At a later stage further functions such as invoicing and payment etc. will also be included.

Information Exchange between Suppliers and Retailers

The basis for this application is the supplier's product file which can be updated on a day-to-day basis from the distribution centre if necessary and which contains all the relevant information needed for an order ready to be called up on the retailer's PC when required.

Whenever the retailer wishes to place an order, he can compile his order in a very short time at the click of a mouse from the product information available. This order is then automatically checked to ensure that it is correct and complete. The retailer can also optimize his order on the basis of any available discounts (for instance, if a discount is only granted on orders in excess of 12 items and only 11 are ordered, this number is corrected to 12).

Finally, the retailer can send the order to the supplier at the press of a button, with the order first being automatically converted and then transmitted to the supplier. All messages are sent in accordance with the UN/EDIFACT standard. The messages received by the distribution centre from all retailers are automatically checked for availability (ability to deliver) and, if the result is positive, the order is automatically passed on for making-up and dispatch. If the result is negative, an order acknowledgement (e.g. quoting a new delivery date) is generated and sent back to the retailer. The retailer can now accept the terms of this order acknowledgement and generate an order amendment which is sent back to the distribution centre.

Benefits

The process described above can be performed in a matter of minutes by the retailer, while at the distribution end everything is fully automated; on the basis of the details available on his PC, the retailer can place an order that has been checked for completeness and correctness or make an amendment in the shortest possible time. This cuts down considerably on administrative work and allows him more time to devote to serving and advising his customers. In addition to this, the retailer also has comprehensive statistical data at his disposal which can tell him a lot about lines that sell well and those that do not, about turnover with the supplier and about much more besides.

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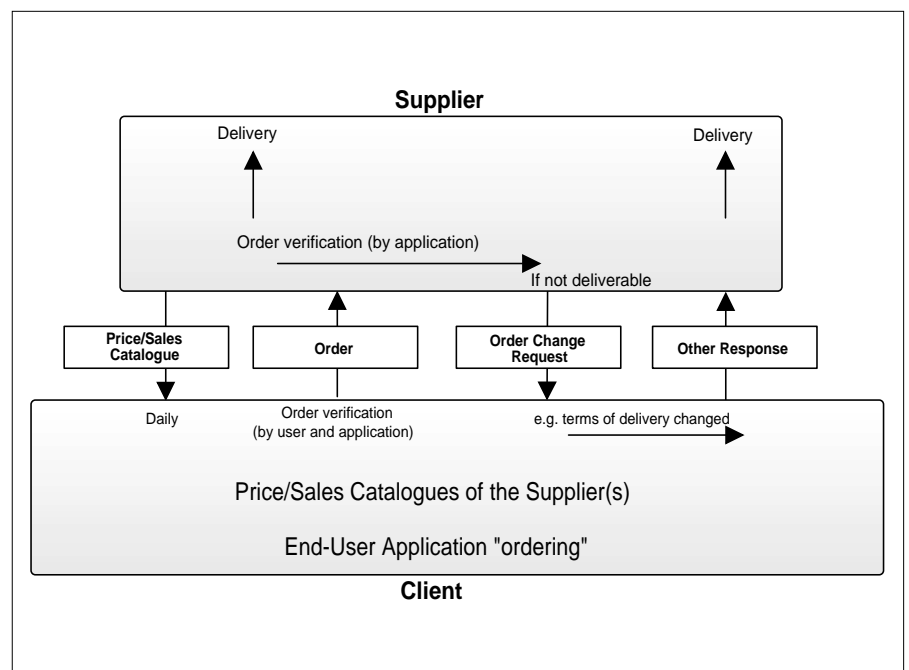** Henri Spinnler is Marketing and Sales Manager at Compudata AG in Basel, Switzerland.*

Figure 1: Business Cycles with Electronic Data Interchange (EDI)